----(Sample Culvert Foundation Report as part of Soil Survey Report)----

SOIL SURVEY SUMMARY

For
BRS-1267(12) Greene County
PI No. 245120

1. Location / Description

This project consists of replacing the bridge on SR 15 at Town Creek with a triple and single 10' x 10' concrete bridge culvert. The project begins on SR 15 at Station 15+00± and continues north across Town Creek to Station 29+00±. The project is located north of the town of Greensboro in Greene County.

2. Geology

This project will be geologically sited in the Granite Undifferentiated Formation of the Georgia Piedmont Region.

3. Rock

Rock in the form of weathered rock layers, which may be removed by heavy equipment or light blasting, was encountered on this project. We estimate this material will be encountered at the following locations:

Station to Station	Location
16+75± to 20+00±	Right

4. Removal

No material requiring removal was encountered.

5. Waste

None

6. Subgrade Materials

No additional subgrade material will be required for this project.

7. Pavement Design Values

We recommend the following values for use in the pavement design calculations for this project:

Soil Support Value = 3.0
Regional Factor = 1.6
Subgrade Reaction, k = 150 pci

Acceptable base materials for use on this project are graded aggregate and asphalt concrete bases.

8. Slopes

Maximum 2:1 slopes will be safe for this project.

9. Groundwater

Groundwater was not encountered at locations of subsurface borings on the project at the time of the investigation.

10. Shrinkage

We recommend an average shrinkage factor of 25% for use in the earthwork calculations for this project.

11. Culverts

We recommend that a 12-inch blanket of Type II Foundation Backfill material be placed under the barrel of all culverts and 46-inch diameter and larger cross-drains on this project.

12. Corrosion

Reference should be made to the attached "Pipe Culvert Materials Recommendations" for materials allowable by the Laboratory corrosion test.

13. Bench Detail

Where new fills are to be placed on existing slopes steeper than 3:1, the existing slope should be benched in accordance with the attached detail.

14. Existing Pavements

An existing pavement evaluation was not requested. If one is needed, please contact the Bituminous Construction Branch of the Laboratory at (404) 363-7530.

15. Pavement Design

We recommend the use of a minimum 8 inches of graded aggregate base, or the equivalent, in the pavement section for this project due to subgrade soils of low soil support values.

16. Special Problems

A. The pond at the following location will require good siltation control during construction:

Station to Station	Location
17+50± to 20+10±	Left

Excavation in this area will impact the pond and dam. We recommend that the property owner be compensated to have the dam be reconstructed by others off the right-of-way. A temporary easement may be required to drain the pond prior to construction.

B. Several driveway cross drains were observed to be obstructed 50% to 100% with silt. These drains should be cleaned out during the construction.

Reported By Nancy N. Hilliard

Reviewed By Tom Scruggs, PE